

47. (New) A method, as claimed in claim 40, wherein:  
said desired report is in the form of a buy and sell ticket.

a2

48. (New) A method, as claimed in claim 40, wherein:  
said desired report is in the form of a client activity log.

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REMARKS/ARGUMENTS

Claims 1, 2, 6, 11 and 12 were rejected under Section 103 as being unpatentable, over Carino, Jr. et al. The Examiner stated that the reference teaches a data processing system comprising a computer processor (350) means for processing data, a storage means (col. 3, lines 32-39) for storing data, and a communication means (218) for transmitting and receiving data to and from various remote locations. The Examiner further stated that the system also includes a means for creating data concerning a particular or specific object (col. 11, lines 25-67) (col. 12, lines 1-190), a means for reviewing the data/output means (col. 4, lines 6-17), and a means for maintaining security measures to prevent unauthorized access (col. 11, lines 25-67) (col. 12, lines 1-19). As applied to claim 2, the Examiner stated that the system comprises means for inputting and storing data on the storage means system information (see Fig. 1). The Examiner concluded that Carino, Jr. et al. has all of the features of the invention but lacks a data processing system for trading, and that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a data processing system for trading, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art.

The Examiner also stated that the system includes modifying the modifications made to the data (454). It is respectfully submitted that as the claims exist in their present state, there is no specific feature corresponding to an element or some means for modifying the modifications made to the data. Therefore, it is respectfully requested that the Examiner clarify the reason for making this statement in the rejection under Section 103. Specifically, Applicant requests that the Examiner identify the element, means, or step in the claims which correspond to this element (454) in the Carino reference.

Applicant respectfully traverses the Examiner's rejection. Since the Examiner has not combined references under Section 103, but has alternatively stated that providing a data processing system for trading would have been obvious, Applicant therefore must assume that the Examiner is taking judicial notice that providing a data processing system for trading would have been obvious. First, Applicant respectfully traverses any form of judicial notice. There are special problems and requirements associated with providing a data processing system for trading securities. Therefore, it cannot be presumed that the functional requirements for such a data processing system would have been merely obvious by substitution with unrelated types of software. Accordingly, Applicant contends that in order for a reference to anticipate or obviate the functional characteristics of a software program set within the data processing system of the present invention, the Examiner must at least cite some reference which generally relates to software within a brokerage system or a system which deals with trading of securities. Applicant also traverses the Examiner's reliance on the theory or doctrine of adjustability, as more fully discussed below.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or references (when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claim combination and the reasonable expectation of success must both be found in the prior art, not in the Applicant's disclosure. *In re Vaeck*, 947 Fed.2 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.) The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

*"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).*

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge or one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzah*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

If proposed modification would render the prior art invention of being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The U.S. Patent No. 5,930,786 to Carino, Jr. et al. is directed towards a method and apparatus for providing shared data to a requesting user. The method comprises the steps of receiving a database query from a user on a first communication path, transforming the database query into database management system commands, transmitting the database management system commands to the database management system, the response comprising an object locator identifying data responsive to the database query, compiling an answer set comprising the database management

system response, transmitting the answer set to the user on the first communications path, receiving a data request from the user comprising the media object locator, establishing a transport session with the user on a second communication path, and transmitting data identified by the media object locator to the user on the second communication path.

As discussed in Col. 1 and 2 of the Carino reference, the invention therein is directed to overcoming various deficiencies with respect to relational database management systems (RDBMS), and object oriented database management system (OODBMS). More specifically, the invention disclosed in the Carino reference is directed toward improvements in efficiently manipulating and moving extremely large objects, especially multi-media objects. The reference further satisfies handling of large objects by using an intermediate database query response comprising a data surrogate associated with large object data instances. A user of the invention is allowed to examine intermediate database query results using the "lightweight" data surrogate before requesting object instance data transmission. The reference also provides for transmission of objects over a secondary channel which may be optionally selected to optimize transmission of large object values or maintain the security of the transmitted data.

As also discussed in Col. 3, lines 52-65 of Carino, the capability to improve the manipulation of large objects is achieved by using an object relational database table instantiation. In the object relational structure, each object in the row is instantiated with a portion in an object relational table instantiation, and a portion in an object storage device. Two data types are therefore associated with large object instances, the object identifier type and the object value type. Thus, a lightweight

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surrogate is allowed to represent data where the objects are too large to be casually copied or moved from one place to another.

Col. 4 of Carino goes on to explain the software architecture in which the database itself is manipulated. More specifically, as explained in col. 4, lines 6-17, a user making a data request may utilize an independent computer with sufficient buffering and processing to support presentation of results to the user. The user host end user applications programs, sends application structure query language (SQL) and general purpose call level interface (CLI) requests to a federated coordinator which participates in object transport connections set up by an object server. The federated coordinator receives result set elements and stages them for display, playback, or further processing by user applications.

As found in col. 5, lines 46-56, the federated coordinator comprises a session management/plan generation module which handles all aspects of primary sessions between users and the host. The session plan/generation module also accepts requests from users, and transforms them into execution plans which are executed by the RDDMS and the object servers, performs database administration, establishes sessions with the user (including maintaining accounting information and termination), and interprets user SQL or CLI requests and transforms them into execution plans. A more detailed discussion of the federated coordinator is found on col. 7 lines 14-67, and col. 8 lines 1-30.

In the Examiner's statement as to corresponding elements in Carino as compared to the elements in the rejected claims, the Examiner indicated that the means for reviewing the data/output means was found in col. 4, lines 6-17 of the reference. In claim 1, element (e) calls for a second computer software means for reviewing said data, and for approving/disapproving of the trade record. Thus, Applicant assumes that the Examiner is taking this element (e) of claim 1, and matching it with the description found at col. 4, lines 6-17 of the Carino reference. From the previous discussion of the Carino reference, it is clear that the description found in Carino at col. 4, lines 6-17 does not relate to or correspond to the claimed second computer software means of claim 1.

The only functional or structural element referred to in col. 4, lines 6-17 of the Carino reference is with regard to the federated coordinator 206. As discussed above at col. 5 of this reference, one important function of the federated coordinator 206 is the ability of the federated coordinator to accept requests from users, and to transform them into execution plans which are executed by the RDBMS and the object servers. Thus, one key feature in the Carino reference is that requests from users in the form of data which is received in the system, is then transformed into execution plans in order to satisfy the user query. Ultimately, the federated coordinator 206 facilitates handling of queries by a user to produce answers for the user based on data available in the system.

In the present invention, the second computer software means for reviewing said trade data, and for approving/disapproving of the trade record corresponds to software in the system referred to as the branch manager's version which allows a branch manager to view created trade data, but with no capability to actually change the content of the trade record. In other words, the second computer software means allows a branch manager to comment upon a trade record, but does not allow the branch manager to actually change the content or format of the trade record created. This functionality found in the branch managers version is opposite of what is described with respect to the federated coordinator 206. The purpose of the federated coordinator is to actually interpret data which is entered by the user, and then to satisfy a query presented by the user. There is no functionality described in the Carino reference which relates to approving or disapproving of data generated by a user in the same manner in which trade record data is approved or disapproved by a branch manager. Thus, it is also important to consider the context in which the functionality of the various computer software means are found in the present invention. The claimed invention relates to managing broker transaction information, while the Carino reference relates to managing the process and retrieval capabilities for large objects within an SQL based operating environment. The nature of broker transactions require that there be some intervention made by a second computer software means for approving/disapproving of a trade record, while a data request made within the Carino reference is not treated in terms of an approval or disapproval, but is manipulated by the invention disclosed therein in terms of satisfying a search or data request. Thus, one significant distinction between the invention claimed in claim 1 and the '786 reference is that the second



computer software means finds absolutely no implied or explicit counterpart within the '786 reference.

As discussed above, the Examiner made reference to the doctrine or theory of adjustability. Applicant will assume that the mention of adjustability specifically corresponds to the use of this term as found at MPEP Section 2144.04 (D) (making adjustable). The discussion which is found in the MPEP at this section is as follows: *In re Stevens*, 212 Fed.2 197, 101 USPQ 284 (CCPA 1954) (claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance and because there was an art recognized need for adjustment in the fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious).

Applicant believes that the Examiner has not correctly applied the theory or doctrine of adjustability with respect to the present invention. Adjustability, as referred to in the MPEP corresponds directly to the physical characteristics of an object being adjustable by use of some structure which allows an element on the device to be selectively moved from one place to another. In the present invention, it does not appear that adjustability can relate to software which is incorporated within a data processing system. Managing broker transaction information is the context or environment in which the software operates, and the claimed first, second and third computer software means simply do not have corresponding functionality within the Carino reference. In other words, the structure of the invention as claimed in claim 1 requires the manipulation of data within a data processing system according to commands which are within the

context of broker transactions, and the Carino reference itself is specifically directed to managing large multi-media data objects, and not broker transactions.

It is also clear that a proposed modification to the Carino reference by placing it in the context of a data processing system which manipulates broker trade records would render the prior art invention being modified unsatisfactory for its intended purpose. As stated above, the main thrust or object of the Carino reference is to efficiently manipulate and move extremely large objects, especially multi-media objects. In the data which is generated within the data processing system of the present invention, there is not a diverse grouping of objects; rather, the present invention manipulates comparatively smaller character or byte strings. With such relatively simple data structures, there is absolutely no need to incorporate the data into the type of data management system discussed in the Carino reference, because there is no real issue or problem in terms of manipulating the data to allow more efficient transfer and reception. Therefore, substituting the large multi-media objects in the Carino reference with the much smaller character or byte strings of the present invention would expressly defeat the purpose of Carino. Therefore, Carino clearly teaches away from manipulating relatively simple character or byte strings of data.

→ As for claim 11, among other distinctions, claim 11 requires the step of monitoring modifications made to the entered trade data residing in the respective data files, and reporting the modifications made to the trade data. In the Carino reference, functionality is not provided for monitoring modifications made to entered data by a user; rather, a response is formulated to the clients query through logic which interprets the user's requests and then satisfies the request by drawing selected data from various databases. In the present invention, monitoring modifications

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and then reporting the modifications is discussed on pages 29-31, and reference therein is made also to Figure 27. At Figure 27, the trade audit report is a functional output which allows a user to view changes made to a trade record. The recordation of such changes in the database, and the ability to access such data regarding modifications made to a trade record is not a function which is found in the Carino reference. Carino has no disclosure or even a suggestion that user requests can be or should be monitored, or that such requests should be recorded in the form of an audit report. Additionally, the argument set forth above with regard to the Examiner's comment as to adjustability of the prior art also applies equally with respect to claim 11. Therefore, the explanation set forth above with respect to the deficiencies in the doctrine of adjustability is also incorporated with respect to claim 11.

Claim 2 depends from claim 1 and for the same reasons set forth above, claim 2 should also be allowed.

Claim 6 depends from claim 1 and for the same reasons set forth above, claim 6 should also be allowed.

Claim 12 depends from claim 11 and for the same reasons set forth above with respect to claim 11, claim 12 should also be allowed.

Applicant gratefully acknowledges the allowability of claims 3-5, 7-10 and 13-27.

New claims 28-48 are presented herein, and further claim the present invention. It is also submitted that these claims clearly distinguish over the prior art of record.

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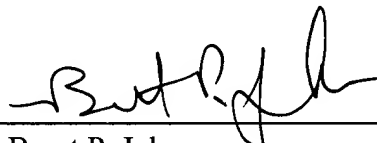
Attached hereto is a marked up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made."

Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Claims:**

Claim 11 has been amended as follows:

11. (Amended) A method of managing and processing broker transaction data comprising the steps of:  
entering and recording trade data into a main server database of a data processing system;  
creating data files in the main server database corresponding to the entered trade data;  
monitoring [all] modifications made to the entered trade data residing in the respective data files; and  
reporting [all] said modifications made to the trade data in a display generated by the data processing system.